DOCUMENT RESUME

ED 049 703 HE 002 120

AUTHOR	Mitchell, Glen H.
TITLE	Some Selected Expenditure Characteristics of Non-Resident Students, New Mexico State University, 1967-68 Academic Year.
INSTITUTION	New Mexico State Univ., Las Cruces.
PUB DATE	69
NOTE	21p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Expenditures, *Higher Education, *Nonresident Students
IDENTIFIERS	*New Mexico State University

ABSTRACT

The purpose of this study was to examine the type and amount of expenditure made in New Mexico by full-time nonresident students attending New Mexico State University in the academic year 1967-68. A structured, nondisguised questionnaire was developed and administered to a sample of 108 students. The results indicated that an estimated $10,000,000 in the 1967-68 school year was added to the New Mexico economy by the 1,253 nonresident students, with the average student spending $3,306. Single students spent less than married ones and, with the exception of the sophomore year, expenditures tended to increase as the student proceeded through college. Female students spent slightly more than males, and graduate students significantly more than undergraduates. Although college students appeared to consider themselves a separate market, the expenditures showed a great deal of variation within all category patterns, except tuition and fees. (AF)

ED049703

RECEIVED
MAR 6 1970
NMSU
E.R.I.C.

SOME SELECTED EXPENDITURE CHARACTERISTICS OF NON-RESIDENT STUDENTS NEW MEXICO STATE UNIVERSITY 1967-68 ACADEMIC YEAR

by
Glen H. Mitchell
Professor of Marketing and Economics
New Mexico State University

in conjunction with
The Marketing Research Class of New Mexico State University
spring, 1968

Las Cruces, New Mexico

Summer, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

HE 002 120

Grateful appreciation is acknowledged to the New Mexico State University marketing research class, spring, 1968, for their skill and industry without which this study would not have been possible. Graduate students Cicil Kasdorf and James Smith played key roles. Thanks also is extended to the University administrators, including registrars Robert Leestamper and Elnora Wiley.

Brief
Summary of Study

An estimated 10 million dollars in the 1967-68 school year was added to the New Mexico economy by the 1,253 non-resident students at New Mexico State University. The average full-time non-resident student spent $3,306. in New Mexico during the 1967-68 school year (9 months).

Non-resident student expenditures in New Mexico broke down into per student: school expenditures of $1,208, food expenditures of $687., transportation and communication expense of $451., housing expenditures of $421., entertainment expenditures of $333., clothing costs of $117., visitors expenses of $85., miscellaneous expenses of $79., personal needs of $54., and medical expenditures of $34. (other than that paid by insurance.)

If the $3,306. figure is adjusted to a 12 months figure, rather than for 9 months, it is apparent that the non-resident student is more affluent than the average New Mexico citizen who had a per capita income of approximately $2,300 in 1968.

Single students spent less than married students ($3,132. as compared to $4,698). With the exception of the sophomore year, expenditures tended to increase as the student proceeded through college. Female students spents slightly more than males ($3,375 as compared to $3,289.) Graduate students spent significantly more than undergraduate ($4,176. as compared to $3,217.). Married students with children spent more ($4,804.) than married students without children ($4,201.).

Although college students appeared to consider themselves a separate market, the expenditures showed a great deal of variation within all category patterns, except tuition and fees. Class rank, marital status, and sex affected expenditures. Although not proven statistically, students exhibited considerable consumer dissonance with services, assortment, and variety of clothing available and location of shopping facilities.

TABLE OF CONTENTS

		Page
I	Title Page	1
II	Brief Summary - One Page	3
III	Table of Contents	4
IV	Intrcduction	5
	A. Background of Problem 1) Growing problems and pains of financing tuition hikes 2) Diminishing of out-of-state students 3) Little known about expenditures of students 4) Desire for students to do some work	
V	Statement of Objectives	5
	A. To find out expenditure patterns of out-of-state expenditures B. To estimate the multiplier effect of out-of--state students	
VI	Aspents not covered in Study	6
	A. Psychological and sociological value of out-of-state students B. Number of students going out-of-state from outside of New Mexico C. The overhead costs of a university D. Idea of attracting people and industry to New Mexico State University of those people attending New Mexico State University E. Others	
VII	Limitations	6
	A. Time B. Money C. Personnel	
VIII	Research Methodology	7
	A. Design B. Sample C. Interviewing D. Terms Used E. Population Dealt With F. Field Work G. Tabulation	
IX	Findings	10
X	Conclusions	19
XI	Recommendations	19
XII	Appendix	21
Bibliography		

INTRODUCTION

During the spring semester of 1968, students in the marketing research class at New Mexico State University expressed a desire to do some type of a group project that would be problem-solving oriented. A disproportionate number of the students in the class were from out of state and they felt that tuition for out-of-state students was being raised to the point that non-resident students were being strongly discouraged. After talking with various persons including Vice President Hafen and Dr. Leestamper, then registrar, it was decided to make a preliminary study of the monetary expenditures of the non-resident student in New Mexico.

Another contributing factor was that though the youth market is wooed by advertisers and manufacturers, there is relatively little known about student expenditures in the Las Cruces and New Mexico areas.

Some students felt that the University was a growth center. With the fluctuations in defense expenditures in the state, they felt that businessmen perhaps were overlooking the potential of the University in adding income to the community plus the possiblility of attracting satellite industry or research laboratories.

From the teaching standpoint, there was much to be said for a project which would invoke involvement and participation plus demonstration of actual research techniques in practice.

STATEMENT OF OBJECTIVES:

The objectives of the study were;

1) To ascertain expenditure patterns in New Mexico of non-resident N.M.S.U. students.
2) To post stratify expenditures by class rank, sex, and marital status.
3) To estimate appromimately the contribution of the out-of-state student at N.M.S.U. to the New Mexico economy monetarily.

In the six year period previous to 1968, N.M.S.U. out-of-state tuition has risen some 79% compared to an average of 32%, according to figures from the U. S. Office of Education. Also, the number of freshmen non-resident students dropped from 424 in 1966 to 239 in 1967, according to Dr. Leestamper.

ASPECTS NOT COVERED IN THE STUDY

Although documented by many such as Schultz, Becker, Meyers, and others, no attempt has been made herein to indicate the advisibility and favorable cost benefit ratio of higher education to the community. One could argue that investment in human copital through education has historically benefitted monetarily both the individual and the society (through higher productivity, income, taxes, etc.).[1]

The cultural contribution made by the out-of-state student is immense as he adds his experience, knowledge, and attitudes to the education experience gained at a University.

Since roughly 23% of New Mexico high school graduates go to out-of-state colleges and universities for various reasons,[2] no attempt is made to judge whether other states have or might take retaliatory steps; thus retarding freedom of choice.

No attempt has been made to judge whether costs of a university decrease on a per student basis with increasing usage of facilities, administrative, and supporting staffs.

LIMITATIONS

Since the study was done with no budget, there was an extreme limit placed on the amount of computation and analysis of data that could be done in the four-month period with non-paid help. More detailed and more sophisticated analysis of the data could have been accomplished with more funds. The

1 - H.P. Miller of the U.S. Census Bureau computes that from the 1959 census that men with only a high school degree will earn approximately about $250,000 in their lifetime, whereas college graduates will earn about $370,659 or an approximate 14.8% return on the investment on higher education.

2 - Digest of Educational Statistics, 1966, U. S. Office of Education, U. S. Government Printing Office, Washington, D. C., 1967, pg. 68.

6

Office of Institutional Studies, New Mexico State University, did donate paper and stencils.

This study was concerned only with full time students--12 hours or more if an undergraduate student, and 9 hours or more if a graduate student.

Expenditures were taken according to the place of expenditure. If not spent in New Mexico, the expenditure was ruled out. Hence total student expenditures are probably higher due to buying out-of-state. (New Mexico State University is located in Dona Ana county whose population is approximately 52,000. El Paso, Texas and Juarez, Mexico are much larger communities only 45 to 50 miles away.) The time period was for 9 months or two semesters. Yet, many non-resident students do attend summer sessions.

The original sample yielded a lower than expected number of married students. As discussed later, the subsample of married students was increased with no significant changes in their expenditure pattern or amounts.

RESEARCH METHODOLOGY

Research Design

The study of non-resident student expenditures was patterned in the descriptive design. The study was intended to examine the type and amount of expenditures in New Mexico made by full-time non-resident students attending New Mexico State University in the academic year of 1967-68. Non-resident student is used here as interpreted by the registrar. The term non-resident is defined by law.

The statistical method design of this descriptive study was used as the large number involved (108) and the nature of the data collected did not lend them to the case method.

Collection Method

The principal goal of the data collection forms used in the non-resident expenditure study was to list and develop all possible expenditure areas. To accomplish this task, a structured, non-disguised questionnaire was developed. (Note Appendix A). One main reason for using this structured questionnaire

was to promote the ease and consistency in collecting and compiling data which extends over this long period of time. One basic problem was in selecting the main expenditure areas in which all student expenditures could be classified. The areas finally decided upon were: school, food, clothing, housing, transportation, entertainment, personal needs, medical needs, visitors' expenses (when paid by the student), and miscellaneous. The next problem was to further break down expenditure areas to aid the student in recalling minute, and possibly forgotten, expenditures.

Personal interviewing techniques was used due to some of the communication problems, recall differences, and to further clarify our purposes.

The original questionnaire was pre-tested by the class and by non-resident students. Their suggestions were incorporated into a final questionnaire. A structured non-disguised questionnaire was used with detailed questions and interviewer prompting to aid in recall.

Sampling

The sample was obtained by using a list of non-resident students registered for 12 or more undergraduate hours or for 9 or more graduate hours during the fall 1967 and spring 1968 semesters. By random numbers, two hundred and sixteen (216) students were selected from the total universe of one thousand two hundred and fifty-three (1,253) non-resident students on the list supplied by the registrar.

Later, sequential sampling indicated that the sample selected of 108 students could have been reduced. However, the sample of married students was apparently inadequate. However, a special subsample of thirty-six married students indicated no significant changes in consumption patterns with the original sample of married students.

Interviewing

Eighteen students were each given a list of twelve names which were grouped in six groups of two. Each group was numbered 1A, 1B, 2A, 2B, 1116A,

6B. Each student interviewed six people using first the A's of each group as first choice. If they were unable to contact the first choice (A) after seven attempts - twice in the a.m., twice in the afternoon, and three times at night, they went on to the alternate B name. If they were unable to obtain the alternate after seven attempts, they called the student sampling committee and another name was selected from the student roster. (The complete universe of non-resident students was difficult to ascertain but it was furthered complexed by the addresses given to administrative offices which were sometimes out of date or inaccurate.) Using the above procedure, the desired sample size of 108 was obtained.

Field Work

The field work was completed in late April, 1968, by the eighteen students in marketing research. The interviewers were trained by role playing (interviewing each other, observing the professor and practice interviewing acquaintances) after two lectures by the research director on information interviewing.[1] All basic information was obtained by personal interviews. Spotchecks were made by phone and a mail questionnaire was later sent out to further validate the interview.

Analysis

The compiling and post-stratification of the raw data, was facilitated with the non-paid use of a 7094 computer. Before transferring the data to punch cards, the expenditures from each questionnaire were broken down into school, food, clothing, housing, transportation, entertainment, personal needs, medical needs, and visitors' expenses and then placed on coding paper. It was then checked by another class member for accuracy.

1 - Based on informal paper of the class professor. Also Mitchell, G. H. and Rogers, E. M., "Telephone Interviewing in Social Research," Journal of Home Economics, Winter, 1960, and Merton, Fiske and Kendall, The Focused Interview, Glencoe, Illinois, Free Press, 1956.

After the information was placed on the punch cards, the 7904 IBM computer, using a program written in Cobalt Language, tabulated the average expenditures, median and the total expenditures of the students interviewed. This was compiled also by comparing expenditures of various class ranks, including graduate and special students, by male and female, marital status, presence of children and by the entire sample.

Due to the time factor and no resources for machine rental, categories covered are not minutely broken down.

FINDINGS (See Table I)

The most striking finding was that in the nine months period of the fall and spring semester, 1967-68 the average student spent approximately $3,306. in New Mexico. When expanded to 12 months and total expenditures, it means the average out-of-state student was quite probably spending at a rate of over twice the national per capita income for this period.

As shown in Table 1, expenditures were more for females ($3,375) as versus males ($3,289.). Graduate students also spent more ($4,176) than undergraduates ($3,217.). Expenditures as ranked by class rank tended to go up from freshmen to senior with sophomores the lowest of all four years.

With the exception of schooling expenditures, there are distinct patterns of spending often varying with class rank, sex, and marital status. Except for schooling, however, there are tremendous variations within all categories.

School Expenditures (See Table 2)

Freshmen and sophomores reported the highest amounts spent for tuition and fees, books, and supplies and school insurance expenditures. One explanation for this is that students at the higher levels tend to carry fewer hours. With less hours, the amounts spent for fees, books, etc. tend to decrease. The $1,028 spent for school expenditures by the average non-resident was consistently the highest of his spending categories.

TABLE 1

REPORTED AVERAGE AMOUNT SPENT IN NEW MEXICO
PER SCHOOL YEAR
BY 108 NON-RESIDENT NEW MEXICO STATE UNIVERSITY STUDENTS
ACCORDING TO RANK, SEX, AND MARITAL STATUS
1967-68 SCHOOL YEAR

Category	Dollars
Freshmen	2,910
Sophomore	2,821
Junior	3,520
Senior	3,629
Graduate	4,176
Male	3,289
Female	3,375
Graduate	4,176
Undergraduate	3,217
Single	3.132
Married	4,698
Married with children	4,864
Married without children	4,201
All Non-Resident Students	3,306

Source: Primary Data

11

Food Expenditures (See Table 2)

Food expenditures averaged $687. but as pointed out by Table 2, married students with children spent approximately $142. a month for food. Single students averaged about $71. a month. Although expenditures vaired, over three-fourths of students had eaten out either in a drive-in or restaurant over twice a month. Females spent slightly less ($675.) than male students ($695.)

Married students, particularly those without cars, were the most outspoken about lack of buying facilities, especially groceries, on or near the university.

Clothing Expenditures (See Table 2)

Expenditures for clothing bought in New Mexico appeared to increase with class rank (86 for freshmen to $189. for graduate students). Clothing expenditures do include accessories and jewelry. Marital status and sex definitely affected expenditures. Females averaged $156. in this category while the average for all was $117. Married students with children averaged $256. for clothing but married without children averaged $110. or $7. below the average for all non-residents.

Students in this category expressed a disappointment in the assortment or variety of clothing and accessories offered for sale in the area.

Housing Expenditures (See Table 2)

Housing appeared to break out in various segments as married students reported their expenditures for rent, utilities and furnishing expenses averaged approximately $152. a month for the previous nine months whereas expenditures for single sophomores averaged about $33 a month. Females spent over 50% more on the average than did males for housing. Similarly, graduate students spent almost three times as much for housing as did undergraduates. (Part of this difference is due to the higher proportion married. However, single graduate students averaged higher for rent than any other group of single students.)

12

TABLE 2

FOR SCHOOLING, CLOTHING, FOOD, HOUSING, TRANSPORTATION AND COMMUNICATION EXPENSE
108 NON-RESIDENT STUDENTS, NEW MEXICO STATE UNIVERSITY
1967-68 SCHOOL YEAR

Comparison of:	School	Food	Clothing	Housing	Transportation
Freshmen	$1058	576	86	374	255
Sophomore	1083	641	104	296	217
Junior	1038	704	108	342	656
Senior	981	698	139	414	696
Graduate	898	997	189	1073	413
Comparison of:					
Male	1028	690	107	383	501
Female	1031	675	156	579	243
Comparison of:					
Graduate	898	997	189	1073	413
Undergraduate	1041	656	109	354	455
Comparison of:					
Single	1040	638	104	316	444
Married	934	1079	220	1258	509
Comparison of:					
Married with children	835	1167	256	1356	494
Married without children	1234	815	110	963	553
ALL NON-RESIDENT STUDENTS	1028	687	117	421	451

Source: Primary Data

Transportation and Communication Expenditures (See Table 2)

Transportation and communication expense, along with food and entertainment, was one of the three categories that the average male spent more than did the average female. The average male spent $501., double the average of female, $243. Over two-thirds of the studnets interviewed owned automobiles. About one-fifth of the cars had been bought in New Mexico. About one-tenth of the students owned a motorcycle, scooter or bicycle of which the majority had been purchased in New Mexico. About two-fifths of the students had bought TBA (tires, batteries, accessories) items in the last nine months.

Seniors had more transportation and eommunication expenditures ($696.) than did any other group.

The majority of students did have telephones (often shared with roommates) and obviously enjoyed long distance phoning.

Apparently, the majority of money spent on trips to and from school was spent out of state as airplane, bus, and train tickets did not show up to any large degree.

Entertainment (See Table 3)

Entertainment sxpenditures did include diverse items such as school entertainments, theaters, drive-in movies, sporting activities, including skiing, swimming, games, sporting equipment, fraternity and sorority dues and assessments, niteclubs and social activities, dates, in-state trips and vacations, liquor and beer, purchase and care of animals, hobbies and others.

Not only was there a diversity between groups but extreme variations within groups. The boarding and caring for a horse, a rabid ski enthusiast or a person who traveled extensively in New Mexico often would spend double the average of $333 for all non-resident students.

Single students spent more for entertainment than did married students. Undergraduate students spent more than graduate students. Male students spent more than one-fifth more for entertainment than did females. Juniors spent more than any other class group while freshmen spent the least. Movies, theatres and social activities went up during the junior year. The presence of children had little apparent effect on amount spent for entertainment of married couples.

Personal Needs Expenditures (See Table 3)

Personal needs which included haircuts, beauty salons, cosmetics, grooming aids, etc. showed an average expenditure of $54 and a median expenditure of $41. Female expenditures was over half again as much as male expenditures for personal needs ($79. vis a vis $4[illegible].)

Medical expenditures which would include medical doctors' services, dentists, optometrists, veternarians, drugs, etc. is difficult to analyze. As related earlier, no expenditure was counted unless paid for directly by the student and purchased in New Mexico. The University provides certain medical services. Many students also have health insurance. Some students possibly availed themselves of medical and dental services in El Paso, Texas, only 45 miles away. In none of these cases would an expenditure show up in this study. The average expenditure per student was $34. a year while the median student showed no expenditure. Medical expenses tended to increase with class rank. Married students with children had the highest expenditures.

Visitors (See Table 3)

Visitor expenditures would include food, room, transportation, entertainment and miscellaneous. Over one-third of the students had visitors for which they (students) expended an added amount of an overall average of $85. Freshmen spent the most ($170) followed by seniors with $124. The majority of married students with children did have visitors for which they had some expenses.

Miscellaneous Expenditures (See Table 3)

Miscellaneous expenditures which included diverse items such as state taxes and licenses, laundry and cleaning expenses, nursery and babysitting expenses averaged $79. with married couples being over twice the average.

About $23. a year was spent on the average for insurance in New Mexico but the majority of students carrying insurance (other than school health insurance) were paying through their home town or regional agent (not in New Mexico).

TABLE 3

REPORTED AVERAGE EXPENDITURES
FOR ENTERTAINMENT, PERSONAL, MEDICAL, AND VISITOR EXPENSES
108 NON-RESIDENT STUDENTS, NEW MEXICO STATE UNIVERSITY
1967-68 SCHOOL YEAR

	Entertainment	Personal	Medical	Visitors
Comparison of:				
Freshmen	$281	44	16	170
Sophomore	309	53	20	20
Junior	382	65	46	60
Senior	308	55	42	124
Graduate	315	49	68	37
Comparison of:				
Male	346	38	33	68
Female	279	79	40	158
Comparison of:				
Graduate	315	49	68	37
Undergraduate	335	54	31	90
Comparison of:				
Single	336	55	28	85
Married	304	46	84	85
Comparison of:				
Married with children	306	45	107	91
Married without children	298	49	13	67
ALL NON-RESIDENT STUDENTS	333	54	34	85

All Non-Resident Miscellaneous Expense 79

Source: Primary data

COMMENT ON NON-RESIDENT STUDENT'S MONETARY CONTRICUTION TO THE NEW MEXICO ECONOMY

There were an estimated 1,253 non-resident full-time students at New Mexico State University in the spring of 1968. Assuming they spent an average of $3,306. (as shown in this study), they added approximately $4,142,418. to the New Mexico economy.

Money once expended tends to be re-spent for other services, goods, etc. resulting in what economists call the multiplier effect. For example, money spent in a restaurant for food is often re-spent for wages, food, utilities, etc. and then often recycled. The multiplier in a local area (state or large metropolitan area) is often from 2.2 to 2.9. It is often estimated that at least 12% of all personal income goes to state and local taxes. If the proportion of the 9.94 million that was personal income was known, we could make an estimate of this contribution to state and local government. National area multipliers would be larger. Using a cautious multiplier of 2.4, we could estimate the 1,253 non-resident full-time student added an approximate 9.94 million.[1]

1 - For a more complete discussion of the multiplier with reference to higher education, look at Markowski, Josept T., The Economic Contribution of the Out-of-State Student to the Economy of Utah. Unpublished MBA thesis, Utah State University, Logan, Utah, 1964.

CONCLUSION AND RECOMMENDATIONS

The study of 108 non-resident students at New Mexico State University revealed that in a nine months period, the students spent approximately $3,306 in New Mexico. Per capita spending of these students was significantly higher than the average per capita income of persons living in New Mexico for a similar time period.

Non-resident student expenditures in New Mexico broke down into school expenditures (tuition, fees, books, supplies, insurance, etc.) of $1,028., food expenditures of $687., transportation and communication expenses of $451., housing expenditures of $421., entertainment expenditures of $333., clothing costs of $117., visitors expenses of $85., miscellaneous expenditures of $79, personal needs of $54., and medical needs of $34. (other than that paid by insurance).

If we adjust the $3,306. figure to a 12-months figure rather than 9 months, it is even more apparent that the college student is more affluent than the average New Mexico citizen. At a time of life when he is faced with many vocational, intellectual, and social alternatives, he is obviously investing heavily in education (schooling expenditures) and also expends heavily in food and housing. He does have discretionary income as indicated by his expending more on transportation and communication than on housing.

Although not proven statistically in this research study, students exhibited considerable consumer dissonance particularly with services, assortment and variety of clothing available, and location of sh pping facilities.

Students, at times, appeared to be unaware of goods and services available in this area. (Only half of the students had read a local paper in the last 24 hours). This may be a result of the relative newness of the students in the community or that students wants are not being met by merchandising and advertising in terms that are readily assimilated by the non-resident students.

19

Although per capita expenditures of non-resident college students is quite high (roughly twice that of the average person) and appears to have a great deal of discretionary income, the student market is not homogeneous but segments into groupings by marital status, sex, and age. Most students appear to consider themselves as a distinct market and tend to compare goods and services, perhaps unfairly, with areas outside of New Mexico.

To tap this affluent non-resident student market, marketers must be aware that this group has its own life style and must be approached as a group searching to maximize their own satisfaction.

Adding almost ten million dollars to the New Mexico economy be their expenditures and subsequent "multiplier", non-resident students are a growth point in the New Mexico economy which should be encouraged.

SELECTED BIBLIOGRAPHY

Calvin, Nilson and Rashmir, Economic and Social Characteristics of the College Market, 1967-68, Market Compilation and Research Bureau, Los Angeles, California, 1967.

Characteristics of the College Market, Marplan Research Report prepared for National Advertising Service, a subsidiary of Readers Digest, 14 reports, New York, N. Y., 1966.

Information File, Vice President for Finance, New Mexico State University, 1967-68.

Lins, Abell, and Hammes, Cost of Attendance and Income of University of Wisconsin Center Students, 1964-65 Academic Year, Office of Institutional Studies, the University of Wisconsin, Madison, Wisc., May 1966.

Markowski, Joseph T., The Economic Contribution of the Out-of-State Student to the Economy of Utah, Unpublished MBA Thesis, Utah State University, Logan, Utah, 1964.

Schepman, Berne A., Impact of the Spending of Out-Of-State Students Attending Utah's Colleges and Universities on the Utah Economy, Utah Coordinating Council of Higher Education, Salt Lake City, Utah, 1967.

Simon, K. A. and Grant, W. V., Digest of Educational Statistics, U. S. Department of Health, Education and Welfare, Washington, D. C., U. S. Government Printing Office, 1966.